

October 21, 2004

Sanford Williams
Attorney Advisor
Telecommunications Access Policy Division
Wireline Competition Bureau
Federal Communications Commission
445 Twelfth Street, SW, Room 5-A420
Washington, DC 20554

Re: Future of Numbering Symposium: CTIA's Request to Participate
CC Docket No. 99-200

Dear Mr. Williams:

On behalf of CTIA – The Wireless Association™, I respectfully request an opportunity to participate in the Bureau-sponsored symposium on “The Future of Numbering.” CTIA originally became involved in numbering policy because access to numbering resources is a competitive issue, especially when competitors control their rivals’ access to these critical resources. CTIA has always supported competitively neutral access to numbering resources and rules that promote the efficient utilization of numbering resources in a manner that provides all carriers with the numbering resources they require to serve their customers. These principles should continue to serve as the touchstones for the future of numbering.

As the North American Numbering Plan Administrator (NANPA) will report, the rules adopted by the Commission, combined with the dampening of the irrational exuberance that had characterized the telecommunications marketplace, substantially increased the estimated life of the North American Numbering Plan (NANP). Indeed, based on current forecasts, the challenges posed by the exhaust of the NANP remain comfortably in the future. Even so, it is appropriate for the Commission to seek the views of interested parties on the future of numbering. If selected to participate in the symposium, CTIA will address the changes in numbering policy that policymakers must consider to support new and emerging technologies and services, and suggest how these changes can continue to promote the efficient utilization of numbering resources. Indeed, in the future, these new technologies may make the Nation’s current reliance on the NANP as archaic and old fashioned as Telex addresses are to today’s text messages.



CTIA believes that new services and technologies offer not only new sources of numbers and many potential substitutes for NANP numbers, but they also can further the efficient utilization of NANP numbers. IP-based networks can route calls to multiple devices based on the network's ability to determine a customer's presence on a network. Thus, much like multiple "extension phones" can reside behind a single twisted pair to a customer's premise, in the future, multiple devices on multiple networks, each one of which now requires a unique NANP identifier, can be served by a single number. Wireless networks already use HLRs and VLRs to route calls without regard to a user's fixed geographic location. IP-based networks will not only be able to support mobility within a single network, but also will permit users to have a single "number" that the network will route to the appropriate wired or wireless device. Already consumers have the ability to use a single number that combines their wireline and wireless services – IP-based networks will make it possible to expand this concept across multiple networks.

The history of numbering in North America illuminates a simple truth – new technologies offer new sources of numbers. Originally, an exchange was limited to a four digit "XXXX" format by the length of an operator's arms which were needed to physically connect calls using cords. As technology permitted exchanges to become connected by electro-mechanical switches, the seven digit "NXX-XXXX" format was introduced. Advances in electro-mechanical switches led to the creation of the now familiar ten digit "NPA-NXX-XXXX" format, but the NPA had to have a "0" or "1" as the second digit, and the exchange prefix could not have a "0" or "1" as the second digit, stranding hundreds of millions of numbers. The introduction of stored program electronic-controlled switches permitted the NANP to use interchangeable NPAs and NXXs, greatly expanding NANP numbering resources. IP-based networks will further expand numbering resources. "0" and "1" as toll indicators may become as irrelevant in the future as exchange names are today. The national "one rate" plans popularized by wireless carriers already have made "toll" calls a thing of the past for wireless customers. And IP-based networks will allow "#" and "*" to take on new meanings, permitting these resources to become as ubiquitous as the formerly obscure "@" has become for Internet addresses.

Not only do new technologies provide new sources of numbers, they also provide unlimited substitutes for NANP numbers. Even as the industry considers ENUM, CMRS carriers are already using substitutes along with NANP numbers. Wireless carriers support number portability by assigning each wireless device a Mobile Identifier Number (MIN) that is linked to the user's Mobile Directory Number ("MDN"). Wireless Push-to-Talk services use PINs (i.e., unique IP addresses) to connect users and NANP numbers for interconnection with the Public Switched Network; Blackberry devices and wireless phones that support text messaging and web browsing also use PINs and IP addresses in addition to NANP numbers. Since these devices can be addressed by either a NANP-based number or a substitute, it is not much of a stretch to foresee the day when users prefer their mnemonic URL to the ten digit NANP number (just as named exchanges, such as the GGreenleaf 5 of my childhood, strike a nostalgic chord for many users of a certain age).

Because of the success of the Commission's efforts to extend the life of the NANP, there is plenty of time to observe the impact of new services and technologies on NANP-based numbering resources before any steps will need to be taken to avoid exhaust. It is quite possible that new technologies and services will further conserve NANP resources; it is even possible that the NANP itself will be replaced in the marketplace by another regime, such as ENUM or URL-based addresses, and no one will notice, just as Telex addresses have faded away after their day in the sun.

While the use of numbers in the future may be quite different, in the near term, both incumbent service providers and new entrants continue to require non-discriminatory access to NANP-based numbering resources. CTIA urges policymakers to focus their attention on removing obstacles to the adoption of new technologies and services and to permit numbering policy to evolve at the same pace as technology.

One area that deserves immediate attention is a review of the role of the states in numbering issues. While Congress authorized the FCC to delegate some authority to the states, Congress clearly granted to the Commission plenary authority over numbering. Under this statutory scheme, the FCC is responsible for insuring that the authority it has delegated to the states does not impede competition or the development of new and innovative services.

The states' interest in numbering issues derives from the legacy of geographic-based NPAs and geographic-based services, originally characterized by jurisdictional separations. Wireless service is provided without respect to these jurisdictional boundaries and the emerging VOIP services also are offered on a non-geographic basis. Because many customers still prefer, at least for now, the familiar geographic-based numbers, and because of legacy call rating and routing systems, continued nondiscriminatory access to NANP-based numbering resources remains a critical element for the development of competition. But the popularity of the national wireless one-rate plans and new VOIP service offerings demonstrates that the public has embraced national, non-geographic-based service offerings. When the state and federal interests are "mixed," it is axiomatic that the federal jurisdiction, which Congress assigned to the FCC, must prevail. The national nomadic services provided by CMRS and VOIP providers has placed administration of the legacy system of geographic-based NPAs beyond the ability of the states to administer.

As CMRS carriers prepare to introduce VOIP-based wireless services, only the FCC can insure that the Congressional intent is honored. State-based regulation of numbering resources, which includes the rationing of numbering resources and the review of carriers' number utilization and growth forecasts, already cannot accommodate the public's demand for new and innovative wireless services; the growth of VOIP-based services will place even greater strains on the states. Fortunately, the NANP has sufficient resources to accommodate this growth, and the rules the Commission already has adopted will insure the efficient utilization of these resources. But the Commission must reclaim its full authority over the administration of these numbering resources to

insure that IP-based networks, and the nationwide nomadic services they provide, obtain nondiscriminatory access to the numbering resources they require to meet the demand for these services.

As the Commission requested, a biographical sketch is attached. On behalf of CTIA, I look forward to participating in “The Future of Numbering” symposium.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Altschul". The signature is fluid and cursive, with the first name "Michael" and last name "Altschul" clearly distinguishable.

Michael Altschul

Encl.

Michael Altschul

Michael Altschul is the Senior Vice President and General Counsel of CTIA – The Wireless Association™. CTIA is an international trade association located in Washington, D.C. Membership in the Association includes wireless carriers and their suppliers, as well as providers of wireless data services and products.

Mr. Altschul joined CTIA in 1990 after serving with the Antitrust Division of the United States Department of Justice. Prior to that, he began his legal career as an attorney specializing in antitrust litigation with Simpson Thacher & Bartlett in New York City.

During his ten year stint at the Justice Department, Mr. Altschul worked exclusively on communications matters, including the Modification of Final Judgment and the GTE decree, as well as related FCC filings and telecommunications industry mergers and acquisitions. As CTIA's General Counsel, Mr. Altschul is responsible for the Association's legal advocacy, CTIA's compliance with antitrust and other applicable laws, and he is an active participant in the development of the Association's public policy positions. For many years, he has represented CTIA and the wireless industry on the North American Numbering Council.

Mr. Altschul received a Bachelor of Arts in Political Science from Colgate University, and a Juris Doctor from the New York University School of Law. He is admitted to the Bar in Illinois, New York, and the District of Columbia, as well as the United States Supreme Court, the United States Court of Appeals for the District of Columbia, and the United States District Courts for the District of Columbia, and the Southern and Eastern Districts of New York. Mr. Altschul has served as co-chair of the Federal Communications Bar Association's Ad Hoc Committee on Telecommunications Competition Issues and the FCBA's Wireless Telecommunications Practice Committee. He also is a member of the Antitrust Section of the American Bar Association, where he serves on the Communications Industry Committee.